Guidance for Peer Review of NASA STI

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1. OVERVIEW

This guidance is intended to help ensure that NASA scientific and technical information (STI) receives the appropriate level of peer review pertinent to its nature and impact. Under most circumstances, NASA STI falls within the "Typical" category discussed in Section 2. Publication types for NASA STI are given in Table 1.

In extremely rare and unusual circumstances, NASA STI may fall within the Office of Management and Budget (OMB) definitions of "Influential" or "Highly Influential" information as defined in OMB's "Information Quality Bulletin for Peer Review," although those categories are normally more pertinent to Federal Agencies with policy-making or other statutory authority. For more information, see http://www.sti.nasa.gov/nasaonly/qualinfo.html and contact the NASA Information Quality Officer listed on that website.

2. TYPICAL STI DOCUMENTS

NASA recommends the minimum level of peer review indicated in Table 1 below for typical STI documents that are in the following publication types.

Table 1. NASA STI Report Series/Non-NASA Publication Types and Technical Review Requirements
[See NPR 2200.2]

Document Type	Review Requirement
TP (Technical Publication)	Technical review by committee of peers or expert single reviewer (see reviewer qualifications in Section 2.1)
TM (Technical Memorandum)	Review by technical management
CR (Contractor Report)	Review by NASA technical management or expert reviewer
CP (Conference Publication)	Review by technical management

SP (Special Publication)	Professional review controlled by HQ Office or NASA Center
TT (Technical Translation)	No technical review; some printing authorization required; permission to use copyrighted information must be obtained
Other NASA STI	Review by NASA technical management and proofreading review prior to submission outside of NASA
Non-NASA Publishers	Review by NASA technical management and proofreading review prior to submission outside of NASA

2.1 Qualifications of Technical Reviewers (for Typical STI Documents)

The NASA STI Program abides by OMBs *"Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies* (February 22, 2002)," as implemented by the *"National Aeronautics and Space Administration (NASA) Guidelines for Quality of Information*" at http://www.sti.nasa.gov/FINAL_NASA_guidelines.pdf.

Under these directives for typical STI documents, NASA accepts and encourages technical review by qualified (based on technical expertise) external reviewers or committees of external reviewers. NASA also accepts technical review by qualified internal reviewers or committees of internal reviewers who are selected on the basis of technical expertise and who do not have (or have disclosed) prior situations or personal or funding issues that would affect their technical review. Technical reviews should attempt to include reviewers who represent a diversity of technical perspectives.

Peer reviews must be conducted in an open and rigorous manner. Peer reviews must also ensure that the data are reliable, unbiased, accurate, complete, and have full documentation and that any situations that could affect data quality are identified and disclosed.

2.2. Types of Reviews for Typical STI Documents

2.2.1 Professional and Technical/ Data/Information Quality Reviews for NASA STI Documents

2.2.1.1 Professional reviews (also called editorial and content reviews):

- Are performed by individuals or groups with technical knowledge or background tempered by interdisciplinary expertise in program management, history, and/or education
- Assess the quality of the document content in terms of its readability, communication of information, and suitability for a particular audience without focus on technical content

2.2.1.2 Technical/Data/Information Quality reviews:

- Are performed by peers having expertise within the technical discipline of the activity or research being documented
- Assess the technical integrity and merit of the activity or research being performed and the results being documented without regard to the effectiveness of the document at communicating the information

See Table 1 for guidance on required reviews of typical NASA STI. See Section 2.1 for qualifications of technical reviewers. See also OMB "*Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies* (February 22, 2002)."

2.2.2 Dissemination Reviews

NASA's dissemination reviews:

- Are handled through the mandatory NASA Form (NF)-1676, "NASA Scientific and Technical Information (STI) Document Availability Authorization (DAA)" review. NF-1676 is NASA's compliance review process for the release of NASA STI by or for NASA through any channel or media
- Apply to the presentation of NASA STI at internal meetings or workshops at which foreign nationals may be present
- Encourage technical approval and reviews for restricted access STI, such as national security classified information, export-controlled information, proprietary/sensitive STI, and documents disclosing an invention

A copy of the latest version of NF-1676 can be found at https://extranet.hq.nasa.gov/nef/user/form_search.cfm or from your Center's forms manager or forms server. For more information, contact the STI Help Desk at email: help@sti.nasa.gov.

2.2.3 Peer Review Committee Planning Guidance (for Typical STI Documents)

A special thanks goes to Dryden Flight Research Center for allowing the STI Program to adapt their peer review process for Agency-wide use.

PEER REVIEW GUIDELINES AND PLANNING

TO THE COMMITEE

As a member of the peer review committee, you are charged with conducting a responsible technical review of the STI document. This means that the review must be open and rigorous and ensure that the data are reliable, unbiased, accurate, complete, and have full documentation. You must also ensure that any situations that could affect data quality are identified and disclosed.

We recommend that you review the document thoroughly for technical accuracy and suitability for publication before the meeting and that you indicate your comments. This may help you during the meeting to have your comments clearly in mind and for the author to include your comments in the final report.

Attendance at the review is mandatory. If you are unable to attend for some unforeseen reason, please give your comments to the chairperson or have them reschedule the peer review for a different time.

TO THE CHAIRPERSON :

You are responsible for making certain that the committee performs the functions specified, as approved by you. If, in the opinion of any committee member, important recommendations are not accepted by the author or by you, as chairperson, the material in question should be discussed with the originating Division Chief or appropriate Manager. You are also responsible for ensuring that the Inter-center and Headquarters comments are handled and dispositioned correctly. You are responsible for notifying the committee members, the authors, the editor and other appropriate organizations if the meeting date or place is changed.

TO THE PROJECT MANAGER:

Please have this report reviewed for potential Export Control and intellectual property restrictions. The author proposes to publish this document as an ___[*insert release information, such as unclassified/unlimited or restrictions as cited on NF-1676*]_____ report. The author will request your signature after the peer review. Your signature indicates that you have reviewed the report; reviewed the release information for your project; and agree with the release information, as indicated on NF-1676.

TO THE AUTHOR:

After the meeting, you should revise the report according to committee recommendations and return it to the chairperson for approval.

PERTINENT INFORMATION FOR PEER REVIEW:

- Meeting Date:

- Time:
- Location:
- Labor Code:
- Type of document:
- Title:
- Authors:
- Project Manager:
- Editor:
- Release Information:
- Disclosure of prior situations or personal or funding issues that would affect reviewers technical review:
- Documentation of significant issues involved in peer review and their follow-up:

PEER REVIEW COMMITTEE CHECKLIST:

1. Is the document technically sound with adequate supporting data?
2. Is the approach valid and supported by the data?
3. Is the material presented clearly?
4. Is there adequate reference to previous work?
5. Is there abstract information?
6. Are all the figures and tables necessary and adequate?
7. Are all the mathematics correct?
8. Is the title as brief as possible without obscuring the meaning?
9. Are the reviewers comments documented and appropriately dispositioned?

2.2.4. Requests for Technical Review or Correction Following Publication

If NASA receives an inquiry from the public relating to possible incorrect data or the need for subsequent correction after an STI document is published or released, follow the guidance below:

- Determine if the error falls within the normal STI correction process allowed for via an Errata or Corrected Copy (see NPR 2200 for additional specifics)

- If not, see the Agency review process indicated in *"National Aeronautics and Space Administration (NASA) Guidelines for Quality of Information"* at http://www.sti.nasa.gov/FINAL_NASA_guidelines.pdf. See also existing requests for corrections reviewed to NASA and the NASA disposition of the subsequent review at http://www.sti.nasa.gov/nasaonly/qualinfo.html. Contact the NASA Information Quality Officer indicated on the website

For additional help or to give suggestions to the above guidance, please contact email: help@sti.nasa.gov or sti+id@larc.nasa.gov

3. REFERENCES

1. Office of Management and Budget "Final Information Quality Bulletin for Peer Review"
http://www.whitehouse.gov/omb/inforeg/peer2004/peer_bulletin.pdf

2. OMB "Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies (February 22, 2002)"
http://www.whitehouse.gov/omb/fedreg/iqg_oct1notice.html

3. "National Aeronautics and Space Administration (NASA) Guidelines for Quality of Information" at http://www.sti.nasa.gov/FINAL_NASA_guidelines.pdf.

4. National Academy of Sciences, "Policy and Procedures on Committee Composition and a Balance and Conflicts of Interest for Committees Used in the Development of Reports," May 2003. Available at: http://www.nationalacademies.org/coi/index.html

5. NPR 2200, Requirements for Documentation, Approval, and Dissemination of NASA Scientific and Technical Information (STI)
http://nodis3.gsfc.nasa.gov/displayDir.cfm?internal_ID=N_PR_2200_002A_&page_nam

6. NF-1676, NSA Scientific and Technical Document Availability Authorization (DAA)
https://pollux.hq.nasa.gov/nef/user/form_search.cfm
http://nodis3.gsfc.nasa.gov/displayDir.cfm?Internal_ID=N_PR_2200_002A_&page_name=main